



**Figure S6. Co-LLPS of hnRNP A1 and TDP-43<sup>274-414</sup>.** The *in vitro* phase separation assay is conducted with the fluorophore-conjugated hnRNP A1 (Alexa Fluor-647, red) and TDP-43<sup>247-414</sup> (Alexa Fluor-488, green). Mixing hnRNP A1 and TDP-43<sup>247-414</sup> results in additional droplets compared to the hnRNP A1 alone and larger droplets than the TDP-43<sup>274-414</sup> alone. Furthermore, the droplets contain both of the green and red fluorescence, indicating that the two proteins indeed co-phase separate. All tests are performed with 100 mM of NaCl and 10% (v/w) PEG 3550. Scale bar: 5  $\mu$ m.